

TECHNICAL DATA SHEET

NUTRIENT AGAR (2,5 %)

NUTRIENT MEDIA

1 INTENDED USE

Nutrient Agar (2.5%) is used primarily in water microbiology for the culture of microorganisms in the context of purification steps required in certain specific standard or protocols of detection and/or enumeration. Use of this media leads to well isolated colonies.

The typical composition of this media responds to that defined in the standards NF EN 14569, NF EN ISO 11731 and NF EN ISO 16266.

2 PRINCIPLES

Relatively simple, the formula supplies the nutritive elements required for the growth of a wide variety of non-fastidious microorganisms.

The media is lacking cysteine, which leads to the absence of growth of *Legionella* on this medium, and helps in orienting the identification.

3 TYPICAL COMPOSITION

The composition can be adjusted in order to obtain optimal performance.

For 1 liter of media :

- Tryptone	5,0 g
- Meat extract.....	1,0 g
- Yeast extract	2,0 g
- Sodium chloride	5,0 g
- Bacteriological agar.....	12,0 g

pH of the ready-to-use media at 25 °C : 7,4 ± 0,2.

4 PREPARATION

- Melt the ready-to-melt tubes (BM125) for the minimum amount of time needed to achieve total liquefaction.
- Cool and maintain in a molten state at 44-47 °C.
- Pour each tube into a sterile Petri plate.
- Let solidify on a cold, flat surface.
- Dry the plates in an incubator, covers partially removed.

5 INSTRUCTIONS FOR USE

- On the surface of the prepared plates, inoculate colonies with a loop by streaking.
- Incubate at 36 ± 2 °C for 24 to 96 hours, according to the types of microorganisms being cultivated.

Note : For other uses, refer to the analytical protocol or standard in vigor.

✓ **Inoculation :**
Surface streaking

✓ **Incubation :**
24 h to 96 h at 36 ± 2 °C

6 QUALITY CONTROL

Prepared media : amber agar.

Typical culture response after 72-96 hours of incubation at 36 °C, qualitative method of inoculation (FD T90-461, NF EN ISO 11731) :

Microorganisms		Growth
<i>Escherichia coli</i>	WDCM 00179	Positive
<i>Escherichia coli</i>	WDCM 00012	Positive
<i>Pseudomonas aeruginosa</i>	WDCM 00025	Positive
<i>Legionella pneumophila</i>	WDCM 00107	Negative

7 STORAGE / SHELF LIFE

Ready-to-melt media in tubes : 2-25 °C.

The expiration date is indicated on the label.

8 PACKAGING

Media ready-to-melt :

50 x 18 mL tubes BM12508

9 BIBLIOGRAPHY

NF EN 14569. Février 2005. Produits alimentaires. Dépistages microbiologiques des aliments ionisés en utilisant la technique LAL/GNB.

NF EN ISO 16266. Août 2008. Qualité de l'eau. Détection et dénombrement de *Pseudomonas aeruginosa*. Méthode par filtration sur membrane.

FD T90-461. Août 2016. Qualité de l'eau. Microbiologie. Contrôle qualité des milieux de culture.

NF EN ISO 11731. Juillet 2017. Qualité de l'eau - Dénombrement des *Legionella*.

10 ADDITIONAL INFORMATION

The information provided on the labels take precedence over the formulations or instructions described in this document and are susceptible to modification at any time, without warning.

Document code : NUTRIENT AGAR 2.5%_EN_v4

Creation date : 11-2006

Updated : 01-2018

Origin of revision : Bibliography.